AFSC SCIENTIFIC AND TECHNICAL LIAISON OFFICE
RESEARCH AND TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
LANGLEY RESEARCH CENTER (NASA)
LANGLEY AIR FORCE BASE, VIRGINIA

764-2944

REPLY TO ATTN OF:

TELEPHONE: [redacted]

SUBJECT: Transmittal of NASA Research and Technology Resume Forms

19 November 1965

TO: AMD (AMRI, Betty J. Evans)
Brooks AFB, Texas 78235

Attached are recent NASA Research and Technology Resume Forms that contain task descriptions of current Langley Research Center efforts which may be of interest to you. If you require further information on these tasks, please contact this office. If similar or related efforts are being conducted at your facility, please forward any available information to this office.

John Samos

JOHN SAMOS, Major, USAF
Chief, AFSC S/T Liaison Office
Langley Research Center (NASA)

127-49-02-05-23

RESEARCH AND TECHNOLOGY RESUME

1.	2. GOVT. ACCESSION	3. AGENCY ACCESSION	

4. DATE OF RESUME	5. KIND OF RESUME	6. SECURITY	7. REGRADING	8. RELEASE LIMITATION	9. LEVEL OF RESUME
22-09-65	D. CHANGE 08-06-65	U RPT U WRK	N/A	GA - NF	A Work Unit

10a. CURRENT NUMBER/CODE	10b. PRIOR NUMBER/CODE
127-49-02-05-23	N/A

11. TITLE:
(U) Crew Research and Performance Analysis

12. SCIENTIFIC OR TECH. AREA	13. START DATE	14. CRIT. COMPL. DATE	15. FUNDING AGENCY
001240 Personnel selection and maintenance (medical); 002400 Bioengineering; 005900 Environmental biology	09-65	N/A	N/A

16. PROCURE. METHOD	17. CONTRACT/GRANT	18. RESOURCES EST.	a. PROFESSIONAL MAN-YEARS	b. FUNDS (In thousands)
B. Contract	b. NUMBER Pending a. DATE c. TYPE d. AMOUNT	PRIOR FY— '65	---	
		CURRENT FY— '66	1.5	

19. GOVT. LAB/INSTALLATION/ACTIVITY	20. PERFORMING ORGANIZATION
NAME: Langley Res. Center	NAME: Not selected
ADDRESS: Langley Station, Hampton, Va. 23365	ADDRESS:
	INVESTIGATORS PRINCIPAL:
	ASSOCIATE:
RESP. INDIV.: SCOW, Dr. Jim - SMD	
TEL: 703-722-7961, Ext. 2278	TEL: TYPE:

21. TECHNOLOGY UTILIZATION	22. COORDINATION

23. KEYWORDS
(U) Performance testing, human research, biomedical instrumentation

24. (U) In monitoring human subjects in stressful situations, equipment is required to insure their safety and to obtain research data. This includes both physiological and psychological functions and environmental factors.

25. (U) During human performance research, medical monitoring of various physiological functions such as heart respiration, body temperatures, central nervous system, and blood oxygenation is required in addition to monitoring the environment such as pressure, temperature, and gaseous concentrations. Other equipment is needed for monitoring human performance. This equipment will be designed and fabricated when it is not available through other sources of purchase or manufacture.

26. (U)

27.	28. REQUESTING AGENCY	29. INTER-CENTER SUPPORT	30. CROSS CODE

31. SPECIAL EQUIPMENT	32. FUNDS ($ K)	IN-HOUSE	CONTRACT
	PRIOR FY— '65	---	---
33. UNIQUE PROJECT: Human Factors Systems, SRT	CURRENT FY— '66	50	---
34. SUB PROGRAM: Human Research and Performance	NEXT FY— '67	50	---
35. TASK AREA: Environmental Physiology			

9/30/65

NASA FORM 1122 (AUGUST 64)
(Items 1 to 26 identical to DD Form 1498)

(OVER)

FDL SSD Mail - HP Encls

127-53-07-04-23

RESEARCH AND TECHNOLOGY RESUME

1.	2. GOVT. ACCESSION	3. AGENCY ACCESSION	

4. DATE OF RESUME	5. KIND OF RESUME	6. SECURITY	7. REGRADING	8. RELEASE LIMITATION	9. LEVEL OF RESUME
05-09-65	A. New	U RPT U WRK	N/A	GA - NF	A Work Unit

10a. CURRENT NUMBER/CODE	10b. PRIOR NUMBER/CODE
127-53-07-04-23	N/A

11. TITLE:
(U) Mass Measurement System for "0"-gravity Spaceflight

12. SCIENTIFIC OR TECH. AREA	13. START DATE	14. CRIT. COMPL. DATE	15. FUNDING AGENCY
004000 Components; 002400 Bioengineering; 012900 Physiology	09-65	N/A	N/A

16. PROCURE. METHOD	17. CONTRACT/GRANT	18. RESOURCES EST.	a. PROFESSIONAL MAN-YEARS	b. FUNDS (In thousands)
B. Contract	b. NUMBER Pending a. DATE c. TYPE d. AMOUNT	PRIOR FY— '65	--	--
		CURRENT FY— '66	0.5	0.5

19. GOVT. LAB/INSTALLATION/ACTIVITY	20. PERFORMING ORGANIZATION
NAME: Langley Res. Center ADDRESS: Langley Station, Hampton, Va. 23365 RESP. INDIV.: OSBORNE, Robert S. - AMPD TEL: 703-722-7961, Ext. 2264	NAME: ADDRESS: Not Selected INVESTIGATORS PRINCIPAL: ASSOCIATE: TEL: TYPE:

21. TECHNOLOGY UTILIZATION	22. COORDINATION

23. KEYWORDS
(U) Prototypes, mass measurement system, zero-gravity spaceflight, manned spacecraft

24. (U) To design, construct, and test laboratory models and flight test prototypes of a mass measurement system for use in zero-gravity spaceflight. An optimum system for measuring the mass of astronauts, animals, life support expendables, and experiment packages will be developed and constructed. Applications to biomedical research will be investigated, and adaptability to MORL and AES missions and associated spacecraft will be examined.

25. (U) Manned spacecraft in a zero-gravity environment will require a system to measure mass, since astronaut and life support component weight changes must be monitored periodically as part of planned experimental programs. Many other experiments will also require mass measurement capabilities (such as animal weight experiments).

26. (U)

27.	28. REQUESTING AGENCY	29. INTER-CENTER SUPPORT	30. CROSS CODE

31. SPECIAL EQUIPMENT	Power supplies - $500. Data recorder - $500.
33. UNIQUE PROJECT	Human Factors Systems, SRT
34. SUB PROGRAM	Life Support and Protective Systems
35. TASK AREA	Personal Equipment

32. FUNDS ($ K)	IN-HOUSE	CONTRACT
PRIOR FY— '65	---	---
CURRENT FY— '66	2	88
NEXT FY— '67	2	65

RB Smith 10/4/65
SPD 10/9/65

NASA FORM 1122 (AUGUST 64) (OVER)